



N 403.000

£ 13,524,000

DIRECTIONS

ALL DIRECTIONS ARE GRID AZIMUTHS
REFERRED TO NORTH ZERO.

PROJECT DEPTHS

PROJECT DEPTHS ARE AS INDICATED ABOVE.

THE AUTOMATED ELECTRONIC SURVEY WAS
CONDUCTED BY FRED LEECH, PARTY CHIEF.
ABOARD THE USACOE SURVEY LAUNCH 3043.


AUTOMATED EQUIPMENT USED

POSITIONING:	STARLINK DGPS
DATA PROCESSOR:	DELL PC
SOFTWARE:	COASTAL OCEANOGRAPHICS
PLOTTER:	ENCAD, CADJET 2
SONIC SOUNDERS:	INNERSPACE 448


NOTES:

1. GAGES USED WERE TAKEN FROM GAGE BOARD SET NEAR THE MOUTH OF THE CLINTON RIVER ON A DOCK PILING IN FRONT OF THE MACOMB COUNTY SHERIFF'S OFFICE.
2. POSITIONS WERE DETERMINED BY GPS. REFERENCE BEACON 838, LOCATED AT FORT WAYNE DETROIT, MICHIGAN - FREQUENCY 319 KHZ, 200 BPS
3. TRANSDUCER FREQUENCY USED TO MEASURE DEPTH DATA WAS 208 KHZ AND THE BEAM ANGLE WAS 3.0 DEGREES.

CHANNEL LINE T.P.		
T.P.	EAST X	NORTH Y
80N	13,526.481.14	403,385.69
90S	13,526.485.11	403,335.07
01N	13,525.989.19	403,433.24
51S	13,525.981.77	403,363.72
52AN	13,525.103.56	403,618.78
52AS	13,525.104.00	403,562.63
52BN	13,524.831.54	403,574.30
52BS	13,524.948.82	403,526.51
53N	13,524.809.45	403,523.77
53S	13,524.837.97	403,481.46
56N	13,524.525.45	403,234.98
56S	13,524.561.01	403,194.92

8.0 FT. CONTOUR 

100' 0 100' 200' 300'

scale  ft

						B.A.
1	MARCH 11, 1994	ADDED POINTS 52A, 52B, 52AN, 52AS, 52BN & 52BS				
NOL	DATE	REVISION				BY
U.S. ARMY ENGINEER DISTRICT, DETROIT CORPS OF ENGINEERS DETROIT, MICHIGAN						
CLINTON RIVER, MICH.						
CONDITION SOUNDINGS						
C.S. 369-HOW TO C.S. 392+00W						
21 MAR 2001						
DETROIT AREA OFFICE						
SUBMITTED:						
APPROVAL RECOMMENDATION:						
CHIEF, PROJ./OPS./SECT. APPROVED		CHIEF, OIS BRANCH				
		SCALE 1" = 100'				
CHIEF, CONTS - COMSEC DIVISION		DRAWING NUMBER: c111010e.dgn				